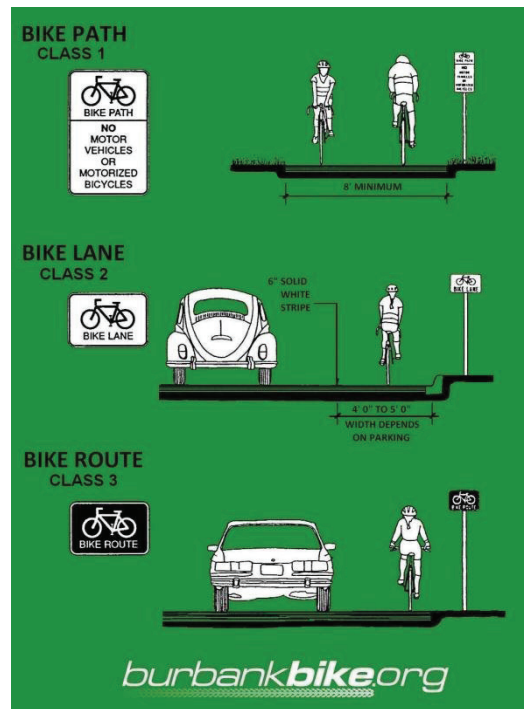


## 3.0 BIKEWAY TYPES

### 3.1 Standard Bikeway Classifications

Bikeways can be classified into three standard types:

- **CLASS I BIKEWAY** – Typically called a bike path, this provides for bicycle travel on a paved right-of-way completely separated from any street or highway. These are particularly popular with novice cyclists and are often avoided by experienced cyclists because they can become overly popular and crowded.
- **CLASS II BIKEWAY** – These are often referred to as a bike lane. It provides a striped and stenciled lane for one-way travel on a street or highway. When properly designed, bike lanes help improve the visibility of bicyclists.
- **CLASS III BIKEWAY** – Generally referred to as a bike route, it provides for shared use with pedestrian or motor vehicle traffic and is identified only by signing. This is recommended when there is enough right-of-way for bicyclists and motorists to safely pass. This treatment is primarily used to point cyclists towards preferred bike friendly corridors, which are often enhanced with bike detection at signalized intersections.



Although these facilities are designed for bicycle travel, it is important to recognize that all public roadways, except for those segments of freeways where it is prohibited, are open to travel by bicycle.

### 3.2 Non-Standard Bikeway Classifications

#### BICYCLE BOULEVARD

A Bicycle Boulevard is generally a low-traffic neighborhood street that has been optimized for bicycling. They provide direct attractive routes for cyclists, while also enhancing and improving the character of the neighborhood. This is accomplished by using a combination of Class III Bike Route and Share the Road signage, "sharrows", and a variety of different traffic calming treatments.

As all roadways and adjacent neighborhoods have different characteristics, each Bicycle Boulevard should individually address these differences. As a result, not all Bicycle Boulevard are the same, but rather "designed to fit". However, the theme remains consistent.

What all Bicycle Boulevards share is commonly referred to as the "Toolbox". This Toolbox consists of the various roadway treatments, or "tools", which can be used to best enhance the roadway and neighborhood for both cyclists and neighborhood residents. The Bicycle Boulevard Toolbox breaks down as follows:

**AUTO SPEED REDUCTION** – Research shows that by limiting auto speeds to 25mph or less, the risk of collision, injury, or death is greatly reduced. The ideal car speed on bicycle boulevards is 15-20mph. The purpose of the tools in this section is to slow cars down on neighborhood streets making them safer for everyone. Examples include:

- **STOP SIGNS** – Stops car traffic, oriented to favor cyclist traveling on bicycle boulevard
- **MINI TRAFFIC CIRCLES** – Reduces auto speed, only within 100 feet of circle
- **TRAFFIC ISLANDS** – Reduces auto speeds as vehicles turn from major arterials to bicycle boulevard
- **MEDIAN ISLANDS** – Reduces turning radii at intersections



**AUTO TRAFFIC REDUCTION** – The maximum average daily traffic (ADT) on a bicycle boulevard is 3,000 cars per day or less, preferably as low as 1,500 cars per day. When auto speed reduction is combined with auto traffic reduction or "diversion", safety on bicycle boulevards is maximized. Cars are still allowed on bicycle boulevards, but diversion treatments encourage them to drive on arterial streets instead of neighborhood streets when they need to get somewhere quickly. The tools in this section limit auto access to bicycle boulevards at critical points, while allowing bicycle traffic to get through. Examples include:

- **SEMI-DIVERSION** – Limits auto access while allowing bicycle access
- **FULL-DIVERSION** – Restricts auto access while allowing bicycle access



**CROSSING BUSY STREETS** – No bicycle boulevard is complete without closing the gaps. Large arterial streets, freeways and railroad tracks all create significant barriers for bicyclists, pedestrians, and neighborhoods. In order to have a working network of bicycle boulevards, it is imperative that cyclists are able to cross major intersections safely. Examples include:

- **HIGH VISIBILITY "ZEBRA" CROSSWALKS** – Increases visibility at crossings
- **CURB EXTENSIONS** – Increases bicycle/pedestrian visibility, shortens crossing distance
- **MEDIANS** – Limits auto access, provides mid-point crossing refuge for bicycles/pedestrians
- **BICYCLE DETECTION** – Cyclist can trigger traffic lights by placing tires over bike symbol. Signal will be actuated by camera or loop detectors.
- **BIKE BOXES** – Brings cyclists to front of the line at traffic lights, priority crossing/turning, reduces right-hook conflicts, as needed filling in the box with color paint can further increase visibility



**BOULEVARD SIGNAGE AND MARKINGS** – Along a Bicycle Boulevard signage and markings are enhanced beyond the standard Class III Bike Route signage. Smaller markings on the ground tell cyclists where to go while larger markings indicate to drivers that they are on a bike boulevard and should slow down. Signs tell cyclists where they are headed and how much further they have to go to reach their destination. The tools in this section offer a few examples of ways to show cyclists and community residents how to get from here to there.

- **SHARROWS** – “Share the Road” arrow. Indicates that cyclist can use the whole lane. Marking designed so if you ride down the center of the arrows, you will be outside the “door-zone”
- **WAY FINDING SIGNAGE** – Indicates distance to certain districts, gives direction and travel time
- **SHARE THE ROAD SIGNAGE** – Indicates to motor vehicle drivers that cyclists may be present

The design standards and guidelines for each of the tools in the Bicycle Boulevard Toolbox are described in more detail in Chapter 8.

